Application No. 10/573,121 Amendment dated June 4, 2009 In Reply to Office Action of January 6, 2009

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) Computing <u>meansapparatus</u> having a software agent for representing a person in the virtual environment, the software agent comprising:

one or more application specific modules, executing on the computing apparatus, each of which represents application specific features of the agent, each respective application specific module representing application specific features which are not known to the other application specific modules;

a core module, executing on the computing apparatus, which contains one or more functional groups which define common or generic features of the agent, said features at least in part facilitating inter-agent communication; and

inter-module communication, executing on the computing apparatus, which , such that inter-agent communication supports communication between a combination of the one or more application specific modules module and the core module.

wherein the respective application specific module sends a request including a label indicating a respective application specific, common or generic feature to be performed, and the inter-module communication determines whether one or more of the other application specific or core modules are capable of performing the respective application specific, common or generic feature based on the label such that when at least one of the application specific or core modules are capable of performing the associated specific, common or generic feature, a call is sent to the one of the application specific or core modules to perform the associated application specific, common or generic feature.

2. (Currently Amended) Computing meansapparatus as claimed in Claimclaim 1, whereinwherein, the functionality of the one or more functional groups comprisegroup comprises one or more of the following, belief management, user profile management, agent-user communication, module management, basic generic reasoning tools and/or between agent module to module communication.

- 3. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein wherein, the core module is provided with method means which provide the one or more functional groups.
- 4. (Currently Amended) Computing means apparatus as claimed in claim 1, whereinwherein, the functionality of the one or more functional groups group correspond to a set of labels.
- 5. (Currently Amended) Computing means apparatus as claimed in claim 1, whereinwherein, communication means are provided to facilitate communication between application specific modules in different agents.
- 6. (Currently Amended) Computing meansapparatus as claimed in claim 1, whereinwherein, the core module acts as an interface between external devices and at least one application specific module.
- 7. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein a specification of message conversation protocols and a specification of primitive message semantics are implemented in separate modules.
- 8. (Currently Amended) Computing means apparatus as claimed in claim 7, wherein wherein, the core module provides primitive semantics for defining communication.
- 9. (Currently Amended) Computing means apparatus as claimed in claim 1, whereinwherein, the one or more application specific modules specify message conversation protocols.
- 10. (Cancelled)
- 11. (Currently Amended) Computing means apparatus as claimed in claim 101, wherein wherein, said inter-module communications means communication connects together all application specific modules and the core module in the agent.
- 12. (Currently Amended) Computing means apparatus as claimed in claim 101, wherein wherein, the inter-module communication means is provided with one or more function calls.
- 13. (Currently Amended) Computing means apparatus as claimed in claim 101, wherein wherein, the inter-module communication means provides for communication between functions in different modules of anthe agent.

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- 14. (Currently Amended) Computing means apparatus as claimed in claim 101, wherein wherein, the inter-module communication means provides for mapping a request from a first module to a method means in a second module.
- 15. (Currently Amended) Computing means apparatus as claimed in claim 14, wherein wherein, said request from said first module comprises a label specifying a function and said method means in a second module corresponds to the specified function.
- 16. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein wherein, the agent further comprises an address resolving means for resolving an address in a message to one of said plurality of one or more application specific or core modules.
- 17. (Currently Amended) Computing means apparatus as claimed in claim 16, 4 wherein said agent further comprises a transfer means for transferring messages from said the resolved modules such that the messages are interleaved to allow an agent to be simultaneously involved in multiple conversations with other agents.
- 18. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein wherein, the computing means apparatus is one or more computers.
- 19. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein wherein, the computing means apparatus is one or more personal digital assistants.
- 20. (Currently Amended) Computing means apparatus as claimed in claim 1, wherein wherein, the computing means apparatus is one or more mobile communications devices.
- 21. (Currently Amended) Computing <u>meansapparatus</u> as claimed in claim 1, <u>wherein wherein</u>, the computing <u>meansapparatus</u> is distributed across a plurality of computing devices.
- 22. (Currently Amended) A method of performing functions in the software agent of the computing means apparatus defined in claim 1, the method comprising the steps of:

receiving a request specifying a function;

mapping said request to a module method corresponding to the specified function; and

invoking said module method.

- 23. (Currently Amended) The method of claim 22, whereinwherein, said request comprises a label specifying said function.
- 24. (Currently Amended) The method of claim 23, wherein wherein, the step of invoking said module comprises the steps of:

receiving a request comprising a label;
looking up the label in a table; and
calling a method corresponding to the label.

- 25. (Currently Amended) The method of claim 24, wherein the step of invoking said module further comprises the step of selecting a highest priority method corresponding to the label.
- 26. (Currently Amended) The method of claim 24, wherein wherein, the method of invoking said module further comprises the step-of-returning a value to an originator of the request.
- 27. (Currently Amended) A method of inter-agent communication between software agents of the computing meansapparatus defined in claim 1, the method comprising the steps of:

receiving a message comprising an address from a first agent;

resolving said address to one of a plurality of one or more application specific or core modules in a second, receiving agent; and

transferring the message to the resolved module.

- 28. (Currently Amended) The method of claim 27, wherein said address specifies the <u>resolved</u> module.
- 29. (Currently Amended) The method of claim 27, wherein wherein, the method further comprises the steps of communicating with an external device by:

identifying the device that a user is employing;
mapping said device to a set of media types; and
initiating the delivery of media to said device responsive to the mapped set.

30. (Currently Amended) The method of claim 29, whereinwherein, the method further includes the step of limiting the set of media types based on user preferences.

- 31. (Currently Amended) A computer <u>readable storage medium storing program</u> comprising program instructions for causing a computer to operate a software agent as claimed in claim 1.
- 32. (Currently Amended) A computer <u>readable storage medium storing program</u> comprising program instructions for causing a computer to perform the method of claim 22.
- 33. (Currently Amended) A computer <u>readable storage medium storing program</u> comprising program instructions for causing a computer to perform the method of claim 27.